

W232CA Transmitter Power Output Calculation

FM System Calculator

Options

Solve For:

☒ TPO ☐ ERP

Antenna input:

☒ End fed ☐ Center Fed

Edit Antenna Database

Transmission Line FM Mid-Band Average Power Rating is 8.08kW

User Input

ERP: .099 kW

Frequency: 94.3 MHz

Center of Radiation (COR) - AGL: 888 ft 270.7 m

SWR Panel W232 Antenna

Additional Losses: 1.1 dB

Distance, Transmitter to Tower: 245 ft 74.7 m

Andrew LDF5-50A, 7/8" Foam Heliax Trans. Line

1st Null 0 Degrees, Infinity mi.

2nd Null

No Beam Tilt or Null Fill Used

Calculated Results

Antenna Power Gain	1.709	Tx Line Length	1128 ft (343.8 m)
Antenna Field Gain	1.3073	Minimum Tower Aperture	20 ft (6.1 m)
Ant. FI @ 1 mi./1kW	179.883 mV/m	Top Bay Elevation - AGL	893 ft (272.3 m)
Antenna Input Power	.058 kW	Antenna Length	10 ft (3.2 m)
Line Attenuation/100 ft	.3521 dB	Bottom of Antenna - AGL	883 ft (269.1 m)
Power Loss in Coax	.128 kW		
		31.1 % Eff	
TPO	.186 kW		

This Software is Provided for Planning Purposes Only!

The Following Systems Will Work In This Application:

A 815D5-5 kW Solid-State Analog FM Transmitter

Line Accessories

# of Hangers	295
Hanger Spacing	3 ft
# of Hanger Adapters	295
# of Hoisting Grips	4
# of Grounding Straps	6